

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BPC604	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/IT2004/000578	International filing date (day/month/year) 22/10/2004	(Earliest) Priority Date (day/month/year) 13/01/2004
Applicant NORDIMPIANTI TECHNOLOGIES S.R.L.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

SUPPORT BODY FOR A DYE METER

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IT2004/000578

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A dye meter (1) is disclosed that is equipped with an assembly (2) for dispensing a plurality of components for making dyeing compositions, a pumping assembly (3) for supplying the dispensing assembly (2), and circuit means (21, 23) for a fluidic connection between the dispensing assembly (2) and the pumping assembly (3); the dispensing assembly (2) comprises a support body (5) defining a plurality of nozzles (7) for delivering respective components; the pumping assembly (3) comprises a plurality of pumps (40) housed into respective seats (41) obtained in the support body in such a way that the circuit means are defined by holes obtained in the support body itself.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01F11/20 B01F13/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01F B01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 072 310 A (ITALTINTO S.R.L.) 31 January 2001 (2001-01-31)	1-5, 7, 8
Y	the whole document	6, 9
X	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 04, 30 April 1996 (1996-04-30) -& JP 07 314647 A (TANIGUCHI INK SEIZO KK; others: 01), 5 December 1995 (1995-12-05) abstract; figures 1-3	1-5
X	US 4 027 785 A (EDSTROM ET AL) 7 June 1977 (1977-06-07) column 2, line 26 - column 3, line 56; figures 1-4	1-4
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

11 March 2005

Date of mailing of the international search report

22/03/2005

Name and mailing address of the ISA

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Authorized officer

Roetsch, P

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/128416 A1 (MARCARIAN XAVIER ET AL) 12 September 2002 (2002-09-12) the whole document -----	6
Y	US 2 848 019 A (CORBIN MILFORD H ET AL) 19 August 1958 (1958-08-19) column 3, line 21 - column 7, line 34; figures 1,3,4,6-10,15 -----	9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IT2004/000578

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1072310	A	31-01-2001	IT MI990460 U1	16-01-2001
			CA 2313964 A1	16-01-2001
			EP 1072310 A2	31-01-2001
			US 6269978 B1	07-08-2001
JP 07314647	A	05-12-1995	JP 2756755 B2	25-05-1998
US 4027785	A	07-06-1977	NONE	
US 2002128416	A1	12-09-2002	FR 2770151 A1	30-04-1999
			US 2003153709 A1	14-08-2003
			CA 2250375 A1	28-04-1999
			CN 1229089 A ,C	22-09-1999
			DE 69811035 D1	06-03-2003
			DE 69811035 T2	16-10-2003
			EP 0913187 A2	06-05-1999
			JP 3093183 B2	03-10-2000
			JP 11209408 A	03-08-1999
US 2848019	A	19-08-1958	NONE	

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IT2004/000578

International filing date (day/month/year)
22.10.2004

Priority date (day/month/year)
13.01.2004

International Patent Classification (IPC) or both national classification and IPC
G01F11/20, B01F13/10

Applicant
NORDIMPIANTI TECHNOLOGIES S.R.L.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	6,9
	No: Claims	1-5,7,8
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

Reference is made to the following documents:

- D1:** EP-A-1 072 310 (ITALTINTO S.R.L) 31 January 2001 (2001-01-31)
- D2:** PATENT ABSTRACTS OF JAPAN vol. 1996, no. 04, 30 April 1996 (1996-04-30) - & JP 07 314647 A (TANIGUCHI INK SEIZO KK; others: 01), 5 December 1995 (1995-12-05)
- D3:** US-A-4 027 785 (EDSTROM ET AL) 7 June 1977 (1977-06-07)
- D4:** US 2002/128416 A1 (MARCARIAN XAVIER ET AL) 12 September 2002 (2002-09-12)
- D5:** US-A-2 848 019 (CORBIN MILFORD H ET AL) 19 August 1958 (1958-08-19)

Ad Section V

- 1) The present application does not meet the requirements of Article 33(1) PCT, because, as far as the claims can at present be understood, the subject-matter of claims 1- is not new in the sense of Article 33(2) PCT or does not involve an inventive step in the sense of Article 33(3) PCT.
- 2) **Independent claim 1**
 - 2.1) Document **D1** discloses (see fig. 1-3 and the related text-passages) a dye meter (2) comprising means (14) for dispensing a plurality of components for making dyeing compositions (cf. col. 1, l. 3-5), pumping means (4, 6-8) (see also fig. 2-3) for supplying said dispensing means (cf. col. 1, l. 42-52), and circuit means (see fig. 3) for a fluidic connection between said dispensing means and said pumping means (see fig. 3), said dispensing means comprising a support body (10) defining a plurality of nozzles (14) for delivering said respective components, whereby said pumping means and said circuit means are carried by said support body of said dispensing means (see fig. 2-3).
 - 2.2) Document **D1** discloses all the features of the apparatus defined in claim 1 and the claim thus lacks novelty with respect to **D1**.
 - 2.3) Since a similar argumentation can be derived from each of documents **D2-D3**, these documents must also be regarded as novelty destroying for claim 1 (cf. the

cited passages of the international search report).

3) Dependent claims 2-9

3.1) Dependent claims 2-9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step:

3.2) The additional features of claims 2-5, 7 and 8 are already disclosed in at least one of documents **D1-D3**:

- Claims 2-4: see **D1**, fig. 2.
see **D2**, fig. 1 and 3.
see **D3**, fig. 1.
- Claims 5 and 7: see **D1**, fig. 2.
see **D2**, fig. 1 and 3.
- Claim 8: see **D1**, fig. 2-3 and col. 3, l. 9-40.

The subject-matter of claims 2-5, 7 and 8 thus is not new.

3.3) The subject-matter of dependent claims 6 and 9 relates to slight changes in the device of claim 1, which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance:

- Claim 6: see for example **D4**, fig. 1-6, the slanted nozzles achieving a better mixing of the fluids.
- Claim 9: see **D5**, fig. 1, 3, 4 and the related text passages [article 6 PCT: the formulation of claim 9 is unclear because the skilled person would not know how the pumps work: What are the role and the location of the related gear and the rotor? How are the respective dye components supplied by the pumps?].

Consequently, the subject-matter of said claims appears to lack an inventive step.

MISCELLANEOUS

- 1) In the case the Applicant intends to further prosecute the present application, independent claims **in accordance with Rule 6.3(b) PCT** (those features known in combination from **D1** being placed in the preamble and with the remaining features

being included in the characterising part) should be filed.

- 2) If amendments are filed, the Applicant must comply with the requirements of **Rule 66.8 PCT** and indicate the basis in the originally filed application of the amendments made (Article 34 (2) (b) PCT) otherwise these amendments will not be taken into consideration for the establishment of international preliminary examination.